

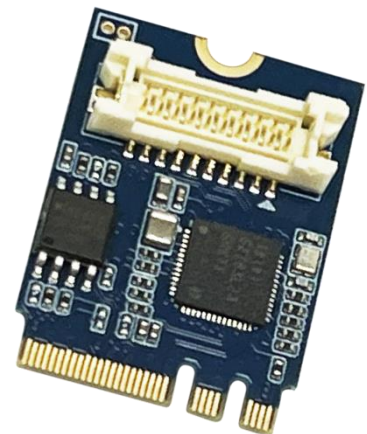


CERVOZ

MEC-LAN-2631i

M.2 2230 (A+E key) 1 port 2.5GbE isolated Ethernet board (-40°C ~+85°C)

Product Datasheet



Date: 2024.05.29

Revision: 1.0

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Revision History

| Date | Revision | Description |
|------------|----------|----------------|
| 2024.05.29 | 1.0 | First Released |

Table of Contents

| | |
|--|----------|
| 1. Product Overview | 4 |
| 1.1 Introduction..... | 4 |
| 1.2 Feature..... | 4 |
| 1.3 MECFIX–Versatile..... | 5 |
| 2. Product Specifications | 5 |
| 3. Dimensions | 7 |
| 3.1 Main Board..... | 7 |
| 3.2 Daughter Board..... | 7 |
| 4. Package Checklist | 8 |

1. Product Overview

1.1 Introduction

MEC-LAN-2631i is a single isolated 2.5GbE LAN module for embedded PC. The card follows the M.2 standard which is compliant with PCI Express x 1 classification and M.2 form factor. This board fits in any host computer that has M.2 slots. MEC-LAN-2631i is a highly cost-effective solution to expand Gigabit network for your computer.

MEC-LAN-2631i has one Ethernet port that supports auto-negotiation 10/100/1000/2500Mbps Ethernet connection with IEEE 802.3x and IEEE 802.3z flow control.

MEC-LAN-2631i uses high performance, efficiency, and stability Intel I226 Gigabit Ethernet Controller.

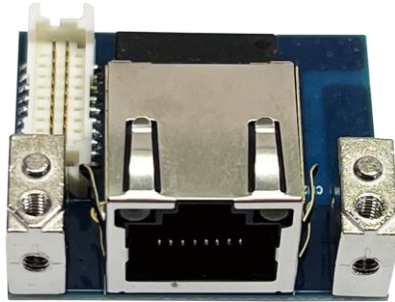
MEC-LAN-2631i is designed with flexibilities for many different application and accessories (daughter board, bracket, connection cable) are included in the standard package.

1.2 Feature

- Single-Lane (x1) PCI-Express with throughput up to 5.0/2.5GT/s
- Fully compliant with PCI-Express Base Specification Rev.2.1
- Integrated 10/100/1000/2500Mbps transceiver
- IEEE 802.3, IEEE802.3u, IEEE 802.3ab, IEEE 802.3z and IEEE 802.3bz compliant
- IEEE 802.3x and IEEE 802.3z flow control
- Support Wake-on-LAN
- Complies with EN61000-4-2(ESD)Air-15kV, Contact-8kV
- Complies with EN61000-4-4(EFT)2kV
- Complies with EN61000-4-5 2kV Surge protection

1.3 MECFIX – Versatile

MECFIX is the unique mounting mechanism designed especially for MEC daughterboard. The feature of the mounting unit allows the following mounting options:



1. Standard PCI/PCIe Bracket
2. Low Profile PCI/PCIe Bracket
3. Internal Mounting inside of PC system from any position and angle.
4. Customizing Front/Rear Plate of PC system according to dimension of MEC daughterboard.

2. Product Specifications

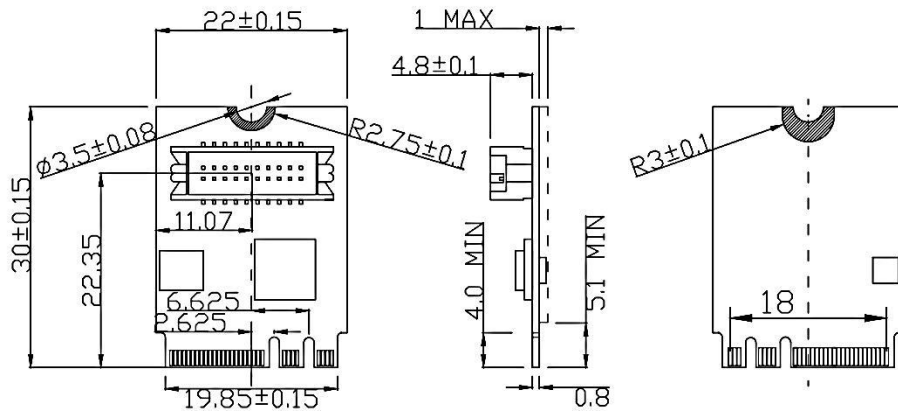
| General | |
|--|--|
| PCI-Express Revision | PCI-Express Base Specification Rev. 2.1 |
| PCI-Express Electromechanical Revision | PCI-Express M.2 Electromechanical Rev. 1.1 |
| Hardware | |
| Controller | Intel I226-IT x1 |
| Bus | Single-Lane (x1) PCI-Express with throughput up to 5.0/2.5GT/s |
| Interface (Connector) | |
| Ethernet 10/100/1000/2500Mbps | 1 (RJ45) |

| Technology | |
|--|---|
| Standards | IEEE 802.3 for 10Base-TE IEEE 802.3u for 100Base-TX IEEE 802.3ab for 1000Base-T IEEE 802.3bz for 2500Base-T |
| Time Sensitive Networking Capabilities | IEEE 802.1Qbu 、 802.3br 、 802.1Qbv 、 802.1AS-REV 、 802.1p/Q 、 802.1Qav |
| Flow Control | IEEE 802.3x and IEEE 802.3z flow control |
| Isolated GbE LAN port | Single |
| Driver Support | |
| Operating Systems | Win 10, Win 11 |
| Power Requirement | |
| Power Consumption | 350mA@3.3V |
| Dimensions | |
| Width x Length (mm) | 22.00 x 30.00 |
| Environmental Limits | |
| Operating Temperature | -40 ~ 85°C |
| Storage Temperature | -40 ~ 125°C |
| Humidity (non-condensing) | 5% ~ 95% |
| Regulatory Approvals | |
| EMC | CE, FCC, UKCA |
| EMI | EN 55032, EN61000-3-2, EN61000-3-3, FCC Part 15 Subpart B, Class B |
| EMS | EN 55035, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11 |
| Reliability | |
| Warranty | 3 years |
| MTBF | >20,161,919 |

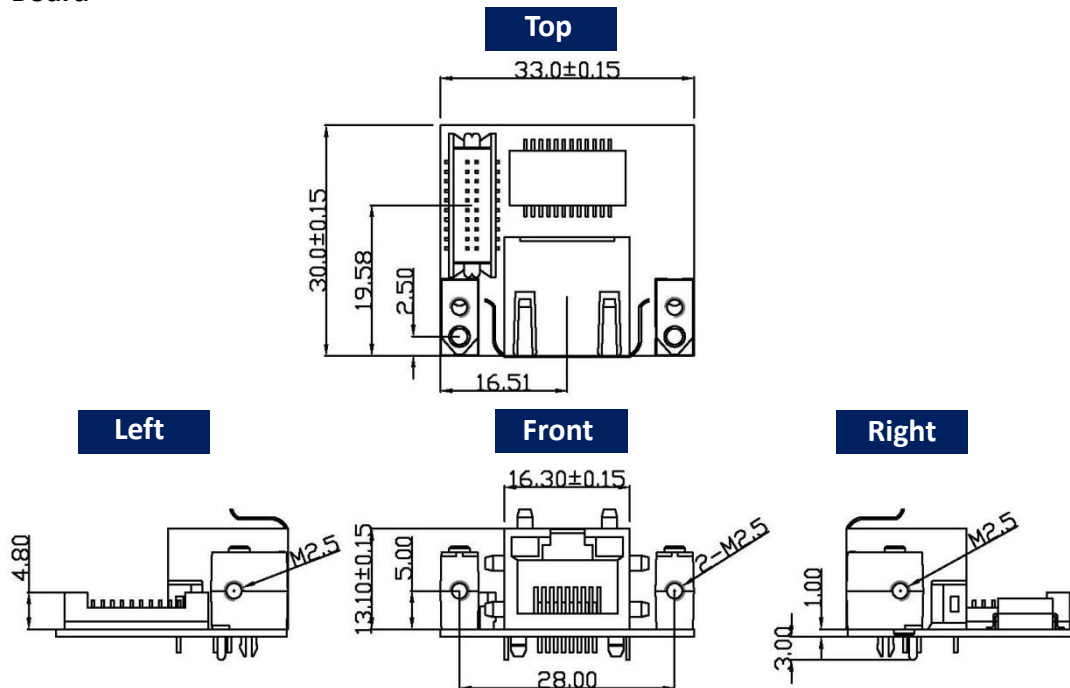


3. Dimensions

3.1 Main Board



3.2 Daughter Board





4. Package Checklist

- M.2 2230 (A+E key) Card x 1
- Daughter Board x1
- Bracket x 1
- M2.5 Screw x 2
- 20Pin Internal Cable (30cm) x 1
- Quick Installation Guide (Printed) x 1

